6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 20

[PS Docket No. 08-51; FCC 15-43]

911 Call-Forwarding Requirements for Non-Service-Initialized Phones

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: The Commission seeks comment on whether the obligation to transmit 911 calls from non-service-initialized (NSI) devices still serves an important public safety objective.

Because the cumbersome call validation methods extant when the rules were adopted in the late 1990s are no longer in use, and because of the current ubiquity of low-cost options for wireless services, the Commission proposes to sunset the obligation to transmit 911 calls from an NSI device within six month, accompanied by consumer outreach and education. Public safety representatives have indicated that NSI devices are frequently used to make fraudulent or otherwise non-emergency calls, causing a significant waste of limited public safety resources.

DATES: Submit comments on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] and reply comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Written comments on the Paperwork Reduction Act proposed information collection requirements must be submitted by the public, Office of Management and Budget (OMB), and other interested

parties on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit comments to the Federal Communications Commission, 445 12th Street SW., Washington, DC 20554. Comments may be submitted electronically through the Federal Communications Commission's Web Site: http://apps.fcc.gov/ecfs//. In addition to filing comments with the Secretary, a copy of any comments on the Paperwork Reduction Act information collection requirements contained herein should be submitted to the Federal Communications Commission via email to PRA@fcc.gov. For detailed instructions for submitting comments and additional information on the rulemaking process, see the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Michael E. Connelly, Attorney Advisor, Public Safety and Homeland Security Bureau, (202) 418-0132 or michael.connelly@fcc.gov. For additional information concerning the Paperwork Reduction Act information collection requirements contained in this document, contact Nicole Ongele, (202) 418-2991, or send an email to PRA@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rulemaking in PS Docket No. 08-51, released on April 1, 2015. The full text of this document is available for public inspection during regular business hours in the FCC Reference Center, Room CY–A257, 445 12th Street SW., Washington, DC 20554, or online at http://www.fcc.gov/document/fcc-seeks-comment-911-call-forwarding-requirements-nsi-phones. Parties may file comments and reply comments in response to this Notice of Proposed Rulemaking (NPRM) on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).

Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://apps.fcc.gov/ecfs//.

Paper Filers: Parties that choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All paper filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission. All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.

Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street,SW, Washington DC 20554.

Summary of the Notice of Proposed Rulemaking

I. Introduction

1. The Commission has a longstanding commitment to ensuring access to 911 for the American public. In support of this objective, the Commission's rules require commercial mobile radio service (CMRS) providers subject to the 911 rules to transmit all wireless 911 calls without respect to their call validation process. Thus, the rule requires providers to transmit both

911 calls originating from customers that have contracts with CMRS providers and calls originating from "non-service-initialized" (NSI) devices to Public Safety Answering Points (PSAPs). An NSI device is a mobile device for which there is no valid service contract with any CMRS provider. As such, NSI devices have no associated subscriber name and address, and do not provide Automatic Number Identification (ANI) or call-back features. As a result, when a caller uses a NSI device to call 911, the PSAP typically cannot identify the caller.

2. In this Notice of Proposed Rulemaking (NPRM), the Commission seeks comment on whether the obligation to transmit 911 calls from NSI devices continues to serve an important public safety objective. A primary rationale for the initial adoption of the Commission's rule in the late 1990s was to expedite wireless calls to 911 that would otherwise have been delayed due to lengthy call validation processes for unidentified callers that were commonly used at the time. In the nearly two decades since the rule was adopted, however, the call validation methods of concern to the Commission are no longer in use. Moreover, the availability of low-cost options for wireless services has increased. These trends suggest that the NSI component of the requirement is no longer necessary to ensure that wireless callers have continued access to emergency services. Further, the inability to identify the caller creates considerable difficulty for PSAPs when a caller uses an NSI device to place fraudulent calls. Public safety representatives have indicated that NSI devices are frequently used to make such calls, causing a significant waste of limited public safety resources. For these reasons, the Commission proposes to sunset the NSI component of the rule after a six-month transition period that will allow for public outreach and education. The Commission also seeks comment on alternative approaches to addressing the issue of fraudulent calls from NSI devices.

II. Background

A. Adoption of the NSI Device Requirement

- 3. In 1996, the Commission issued its E911 First Report and Order, which required covered carriers (now defined as CMRS providers) to transmit all 911 calls from wireless mobile handsets that transmit a code identification, without requiring any user or call validation or similar procedure. The Commission noted that user validation procedures, such as requiring a caller to provide credit card information, could be long and cumbersome, and that applying these procedures in emergencies could thus cause a dangerous delay or interruption of the 911 assistance process and, effectively, the denial of assistance in some cases. The Commission also required covered carriers to comply with PSAP requests for transmission of 911 calls made without code identification. Even at the time of adoption of the NSI requirement, however, the Commission recognized that there were disadvantages associated with requiring all 911 calls to be processed without regard to evidence that a call is emanating from an authorized user of some CMRS provider. The Commission acknowledged that placing 911 calls from handsets without a code identification has significant drawbacks, including the fact that ANI and call back features may not be usable, and hoax and false alarm calls may be facilitated. The Commission concluded, however, that public safety organizations are in the best position to determine whether acceptance of calls without code identification would help or hinder their efforts.
- 4. In response to several petitions for reconsideration of the <u>E911 First Report and</u>

 <u>Order</u>, the Commission issued a stay of its rules and sought additional comment. On the basis of the updated record on reconsideration, in 1997 the Commission released its <u>E911 First</u>

 <u>Memorandum Opinion and Order</u>. In that order, the Commission determined that without applying validation procedures, then-present technology could not distinguish between code-identified and non-code-identified handsets. Accordingly, the <u>E911 First Memorandum Opinion</u>

 <u>and Order</u> required carriers to forward all 911 calls whether or not they transmit a code

identification. The Commission also found that PSAPs should be able to screen out or identify many types of fraudulent calls or those where call back is not possible and also expressed the hope that PSAPs could implement call back technology for NSI devices.

- 5. Since the adoption of the NSI requirement, the Commission has been aware of the continuing concern regarding fraudulent calls and the lack of call-back capabilities associated with NSI devices, and has taken various measures to address this issue. In 2002, the Commission required NSI handsets donated through carrier-sponsored programs, as well as newly manufactured "911-only" devices, to be programmed with the number 123-456-7890 as the "telephone number," in order to alert PSAPs that call-back features were unavailable. The Commission also required that carriers complete any network programming necessary to deliver this programmed number to PSAPs. Later that year, the Commission clarified that its rules requiring carriers to forward all 911 calls to PSAPs did not preclude carriers from blocking fraudulent 911 calls from non-service initialized phones pursuant to applicable state and local law enforcement procedures. The Commission added that where a PSAP has identified a handset that is transmitting fraudulent 911 calls and makes a request to a wireless carrier to block 911 calls from that handset in accordance with applicable state and local law enforcement procedures, the carrier's compliance does not constitute a violation of Section 20.18(b).
- 6. In its subsequent <u>E911 Second Memorandum Opinion and Order</u>, the Commission modified its rules to require that carrier-donated handsets and newly manufactured 911-only devices be programmed with the number "911," followed by seven digits from the handset's unique identifier, such as the Electronic Serial Number (ESN) or International Mobile Station Equipment Identity (IMEI) (911+ESN/IMEI). The Commission took this action to facilitate identification of individual NSI devices used to make fraudulent or harassing calls, finding it "highly probable" that this form of identification would enable a PSAP to identify a suspected device and work with carriers and law enforcement to trace

it and block further harassing calls from the device. The Commission further stated that it would continue monitoring the nature and extent of problems associated with 911 service for NSI devices.

B. Notice of Inquiry

- 7. In February 2008, a coalition of nine public safety organizations, including the National Emergency Number Association (NENA) and the Association of Public-Safety Communications Officials (APCO), and a software development firm (Petitioners), filed a petition for notice of inquiry (Petition) to address the problem of non-emergency calls placed to 911 by NSI devices. The Petition contended that while the *E911 Second Memorandum Opinion and Order* achieved the goal of helping PSAPs identify when 911 calls are from NSI devices, such calls continue to create severe problems for PSAPs. The Petition asserted that only a very small minority of the 911 calls from NSI devices were made to report actual emergencies, and that non-emergency NSI calls waste the limited and precious resources of the PSAPs and interfere with PSAPs' ability to answer emergency calls, as do subsequent efforts to locate or prosecute the callers.
- 8. The Petition also asserted that when PSAPs and other authorities requested that CMRS providers block harassing 911 calls from NSI devices, the providers had declined, citing technical and legal concerns related to complying with such requests. Accordingly, the Petition requested that the Commission provide further clarification and guidance on this blocking option to stop harassing and fraudulent 911 calls from NSI devices. The Petition also asked the Commission to consider other options to address fraudulent calls from NSI devices, including identifying further call-back capabilities for NSI devices, the elimination of call-forwarding requirements for NSI devices, and/or requiring CMRS providers' donation programs to provide service-initialized devices. In the alternative, the Petition asked the Commission to seek comment on other solutions.
- 9. On April 2008, the Commission granted the Petition and issued a *Notice of Inquiry* to enhance its understanding of the problems created by non-emergency 911 calls made from NSI devices and to explore potential solutions. In the Notice of Inquiry, the Commission requested comment on three specific areas: (1) the nature and extent of fraudulent 911 calls made from NSI devices; (2) concerns with

blocking NSI devices used to make fraudulent 911 calls, and suggestions for making this a more viable option for CMRS providers; and (3) other possible solutions to the problem of fraudulent 911 calls from NSI devices. In response to the *Notice of Inquiry*, the Commission received comments from public safety representatives at state, county, and local government levels in twenty-one states, as well as comments from CMRS providers, third-party vendors, and others.

C. 2013 Public Notice

10. In their comments to the Notice of Inquiry, the Petitioners, including NENA, argued in favor of retaining the NSI call-forwarding requirement on the grounds that the public relied on the fact that NSI devices are 911-capable and that a significant number of calls to 911 from NSI devices are legitimate. However, in an *ex parte* filing submitted in 2013, NENA revised its view, stating that it now supported eliminating the 911 call-forwarding requirement, and that there was now a "consensus view" that requiring 911 call forwarding from NSI devices does more harm than good. In light of NENA's revised view on the necessity of retaining the 911 call-forwarding requirement, as well as the passage of time since the filing of comments in response to the Notice of Inquiry, in March 2013 the Commission released a public notice seeking to refresh the record on the foregoing issues (*2013 PN*). In response to the *2013 PN*, the Commission received six comments from public safety entities and one from a CMRS provider.

III. Discussion of Proposed Sunsetting of the Requirement to Transmit 911 Calls From NSI Devices

11. The record received in response to the <u>Notice of Inquiry</u> and <u>2013 PN</u> has helped to further define and document the problem of fraudulent 911 calls placed by users of NSI devices. As discussed below, the problem remains acute. At the same time, the evolution of the record and changes in wireless service offerings, including the expanded availability of low-cost wireless services, suggest there is now significantly less need for the NSI rule then when it was adopted in 1996. Accordingly, in this NPRM we propose to sunset the NSI rule after a six-month transition and outreach period. During the

transition period, we would partner with industry and public interest organizations to educate consumers about the transition and the availability of alternative means to call 911. We seek comment on this proposal in the discussion below. We also seek comment on the relative costs and benefits of other potential approaches and solutions to the problem, including blocking calls from NSI devices.

A. Public Policy Analysis and Comparative Benefits

- The Extent of Fraudulent 911 Calls from NSI Devices and Associated Costs to Public Safety
- 12. The record to date shows that fraudulent 911 calls from NSI devices continue to pose a major problem for PSAPs, imposing substantial costs while reducing their ability to respond to legitimate 911 calls. In the *Notice of Inquiry* in 2008, the Commission cited data from the Petitioners, generated in late 2006 from jurisdictions in four states, showing that between 3.5% and less than 1% of 911 calls placed by NSI devices were legitimate calls relating to actual emergencies. The Notice of Inquiry asked commenters to provide more recent and expansive data from the same and other jurisdictions, and also welcomed further evidence illustrating the extent of the problem, such as statements from knowledgeable parties and media reports. In response, public safety commenters provided additional evidence that the vast majority of 911 calls from NSI devices were not actual calls for help, and that these calls both wasted the limited resources of PSAPs and interfered with their ability to respond to legitimate emergency calls. For example, Indiana estimated that over 90% of all NSI calls received were not legitimate, while North Carolina similarly reported that between May 15, 2008 and June 15, 2008, PSAPs across the state received 159,129 calls from NSI devices, of which 132,885, or 83.51%, were non-emergency calls, and an additional 11,395, or 7.16%, were "malicious" non-emergency calls. Amelia County, Virginia also stated that NSI devices were the biggest problem we have with the E911 system, and that, at times, they had been inundated with phone calls from these phones with the only purpose being to harass the call takers/dispatchers. Washington State likewise indicated that by far, the majority of calls to 911 from NSI sets did not appear to be legitimate emergencies. Moreover, Washington estimated that reported NSI problems were very likely an understatement, due to lack of time and resources of PSAPs to respond to

the *Notice of Inquiry*. Other public safety commenters reported similar patterns of frequent and recurring non-emergency calls from NSI devices.

- 13. Subsequent to the close of the *Notice of Inquiry* comment period, the Commission continued to receive evidence that fraudulent 911 calls from NSI devices remain a large problem for PSAPs and other public safety entities. Comments received in response to the 2013 PN also indicate that the problem is continuing. For example, Tennessee states that during a three-month period in 2008, of over 10,000 NSI calls only 188 were valid emergencies. Sonoma County, California indicates that between April 2011 and April 2013 only approximately 8% of calls from NSI devices were to report an emergency or crime. Peoria, Illinois similarly asserts that it got numerous calls from NSI phones that were used to harass the 9-1-1 telecommunicators and pump as many as 25 calls per day into Peoria's system, while few if any actual 9-1-1 calls came from these types of phones. Media reports also indicate that this is a serious and continuing problem.
- 14. The Commission seeks comment and updated data regarding the degree to which the issue of fraudulent calls from NSI devices has continued since the 2013 PN comments were filed, as well as any other data that will help clarify the extent of the problem. Have changes in mobile device technology or design had any impact on the overall numbers of fraudulent NSI 911 calls? Has the increased proliferation and use of smartphones added to or reduced the problem, and if so, how? What technological advancements, if any, might increase the ability to trace back individual NSI callers and thereby deter fraudulent calls?
- from particular types of NSI devices or subsets of NSI device users. Several commenters suggested that a disproportionate number of fraudulent 911 calls come from a relatively small subset of NSI devices. California, for example, stated that between October 1, 2007 and May 15, 2008, PSAPs across the state reported 266 active repetitive callers who placed over 77,000 calls to 911, mainly using NSI devices. Of the 266 callers identified, 85 had placed 200 or more calls, and eight callers had made more than 1,000 calls. Other commenters noted that such calling patterns were often related to the accessibility of NSI

devices to minors. For example, Petitioners stated that donated phones appear to be only a small portion of the problem, with the bulk of troublesome devices being old equipment no longer in use, often given to children to play with. Is data available regarding the percentage of fraudulent NSI calls that come from minors? Are there other categories of NSI devices that are disproportionately associated with fraudulent calls? For example, how frequently do fraudulent calls originate from NSI devices that appear to have been purchased by individuals specifically for the purpose of placing such fraudulent calls (e.g., devices purchased on auction sites or at pawn shops)?

- 16. Some public safety commenters have also argued that the NSI rule exposes PSAPs to the risk of coordinated efforts to overload or impair their operations. Clinton County, Illinois, for example, cited the possibility of a group of individuals perpetrating a wireless denial-of-service by placing large amounts of calls to 9-1-1 from NSI phones, with the potential of jamming or at the very least severely impairing the operations of the 9-1-1 system. Accordingly, the Commission seeks comment on the extent to which NSI devices could be used in a coordinated manner to deny 911 service.
- 17. Finally, the Commission seeks further comment regarding the costs that fraudulent NSI calls to 911 continue to impose on public safety and on consumers. For example, in response to the *Notice of Inquiry*, Kentucky indicated that the time taken away from real emergency calls to deal with calls from NSI devices seriously threatens the safety of any citizen in true need of service. Amelia County, Virginia similarly stated that there have been times when it has been totally inundated with calls from NSI devices. Tennessee notes how calls from a single child in one night nearly immobilized the call center's ability to receive actual emergency calls. Spokane County, Washington noted receiving 911 calls from a non-initialized cellular phone that was an open line and therefore tied up one of our 911 trunks and made it unavailable for emergency calls. Laredo, Texas cited bomb threats made from NSI phones which, when they cannot be identified with absolute certainty as a hoax, require deployment of response agencies to the alleged target. The Commission asks commenters to provide instances of fraudulent NSI calls delaying the ability of public safety dispatchers to send help to callers in distress or otherwise negatively impacting the ability of first responders to respond to actual emergencies, and seeks examples

of fraudulent NSI calls impeding public safety, such as whether prison inmates have used the 911-calling capability of NSI devices to harass PSAPs or to circumvent call blocking or managed access technologies designed to deter contraband cellphone use from inside prison facilities. In all of the above examples, the Commission seeks cost estimates of the losses – including financial or human capital resources – that PSAPs have incurred due to fraudulent calls.

2. Decreasing Benefits of the NSI Rule

- 18. At the same time that the NSI requirement imposes costs on public safety resources – by diverting much-needed resources from legitimate emergencies – the record suggests that the benefits of the NSI rule are diminishing and the need for the rule is decreasing. The Commission seeks comment on whether this is the case. For example, several commenters pointed out that service-initialized devices have become far more ubiquitous and inexpensive, as compared to when the Commission originally implemented the NSI rule, thereby decreasing public reliance on the ability of NSI devices to call 911. Washington State, for instance, noted that when the NSI rule was adopted, there were few opportunities for a customer to acquire a wireless device other than by signing a relatively expensive long-term contract. Thus, while the rule originally ensured access to 911-service for segments of the population that could not afford a long-term wireless subscription, Washington contended that service-initialized devices are now sufficiently ubiquitous and affordable to render the rule unnecessary. CTIA likewise indicated that wireless device prices in the U.S. keep dropping; since 2006, wireless CPI has fallen 8.0%, even as the CPI for all items has increased 16.7%. In this regard, the Commission notes that the Bureau of Labor Statistics' Wireless Price Index shows that the effective monthly cost of wireless service to consumers has fallen by more than 40% since December 1997. There has also been a proliferation of pre-paid devices since the Commission promulgated the NSI rule. For example, CTIA reported that 76.4 million consumers had prepaid plans in 2012, up from 71.7 million in 2011.
- 19. Several commenters have also noted the potential of Lifeline-supported wireless services to provide a sufficient alternative to NSI phones. Accordingly, the Commission seeks comment on

whether the increasing ubiquity and decreasing cost of service-initialized devices obviates the need for the NSI rule. Does the increased availability and use of pre-paid services provide a sufficient alternative?

- 20. Many commenters also referenced a decrease in NSI handset donation programs. For example, NENA stated that most charities and domestic violence advocates have abandoned the practice of distributing NSI devices. APCO similarly indicated its understanding that current programs for at-risk individuals only distribute handsets that have at least limited carrier-subscription status and are 'service initialized.' This also seems to indicate a decreasing need for the NSI rule due to fewer NSI devices in circulation.
- 21. Two public safety commenters (King County, Washington, and Livingston County, New York, Sherriff's Department) also argued that eliminating the NSI requirement would eliminate false expectations among NSI device users who are unaware that NSI devices do not provide 911 call-back capability or Phase II location information. Other commenters, however, argued that the public has come to rely on the fact that NSI devices are 911-capable, and that eliminating the call-forwarding requirement could lead to tragic results given this public reliance. CTIA, for example, stated that the public now has a reasonable expectation that all wireless 911 calls will terminate at a PSAP. Likewise, the Petitioners noted that they while they were sympathetic to those calling for an outright FCC reversal of current rule, they could not support such a request at this time because there remain a significant number of legitimate 9-1-1 calls from NSI devices. California noted that calls from NSI phones have saved many lives, and Maryland indicated that 30% of calls to 911 from NSI handsets were legitimate in Montgomery County during the one-month period studied in 2008. Vermont also questions the availability of low-cost serviceinitialized devices, and adds that it is puzzled by the comment that calls on these devices do not include location information, as its review identified a high percentage of calls from NSI devices that arrive with Phase II location information.
- 22. Accordingly, the Commission seeks comment on the extent to which the public, especially lower-income populations, the elderly, and other vulnerable segments of society, still rely on the use of NSI devices to seek emergency assistance. Has such reliance decreased, increased, or remained

the same? Would consumers who presently use NSI devices to call 911 be able to effectively utilize other means of accessing 911? To what extent are "911-only" wireless handsets that rely on the NSI rule to enable a caller to reach a PSAP in use today? Are CMRS providers or third parties continuing to support NSI phone donation programs, and if so, are figures available for the number of phone donations within the last five years?

B. Sunset of the NSI Requirement after a Reasonable Transition Period

- eliminate the 911 call-forwarding requirement for NSI devices because abolishing the requirement at this stage would restrict basic 911 service and result in the inability of many non-initialized wireless phone users to reach help in the event of an emergency. However, in the subsequent *Notice of Inquiry*, the Commission noted that the evidence suggested that NSI devices were the source of an overwhelming number of fraudulent 911 calls and sought comment regarding whether it should eliminate the NSI requirement. In response to the *Notice of Inquiry*, a significant number of public safety commenters advocated for elimination of the rule. Washington, for example, asserted that there is no justification in retaining the rules permitting calls to 911 from non-initialized handsets; more recently, NENA stated that there is now a consensus view that the promotion of NSI devices does more harm than good.
- 24. Accordingly, the <u>2013 PN</u> sought comment, in particular, on whether other interested parties agree or disagree with NENA's view that the Commission should consider phasing out the call-forwarding requirement as it applies to NSI devices. The subsequent record indicates that APCO now also agrees that the FCC should eliminate the requirement that wireless carriers forward to PSAPs 9-1-1 calls from NSI handsets, as do some other public safety commenters.
- 25. At the same time, some commenters continue to advocate retention of the NSI requirement, arguing that the public has come to rely on the fact that NSI devices are 911-capable, and that given this public reliance, eliminating the call-forwarding requirement could lead to tragic results.
- 26. <u>Discussion</u>. The Commission believes that the concerns that led the Commission to adopt the NSI rule in 1996, and to retain it twelve years ago, are less relevant today, and that it is now in

the public interest to sunset the requirement. The record suggests that fraudulent calls to 911 from NSI devices constitute a large and continuing drain on public safety resources and that the problem is not abating. Moreover, it appears there is now less public need for the NSI rule than at the time the Commission implemented it. Indeed, while the Commission implemented the NSI rule in large part at the urging of public safety entities, including NENA and APCO, both of these entities now favor elimination of the rule.

- 27. Additionally, impending technological changes in carrier networks are likely to make the NSI call-forwarding rule less effective in protecting consumers while increasing the cost of implementation. As carriers migrate their networks away from legacy 2G technology, 2G-only NSI handsets will no longer be technically capable of supporting 911 call-forwarding. If we retain the NSI rule, this technological shift is likely to create confusion among the very consumers that have retained older-generation NSI handsets for their 911 capability. Moreover, retaining the rule will impose added costs on carriers to implement NSI call-forwarding capability in 3G and 4G networks. While the Commission recognizes that public safety interests are driven by more than economic considerations, it believes that avoiding these added costs by sunsetting the rule will have significant net cost benefits for carriers, in addition to eliminating the burden of fraudulent 911 calls on first responders. Conversely, the Commission believes that any cost to carriers associated with removing NSI call-forwarding capability from their networks will be relatively minor. For these reasons, the Commission believes that the costs of retaining the NSI rule appear to outweigh the benefits, and thus proposes to sunset the NSI rule after a six-month transition period.
- 28. Based on the comments advocating for elimination of the rule, the Commission believes that a uniform, nationwide deadline to sunset the NSI requirement would best address the concerns that have been raised in the record regarding the prevalence of fraudulent calls from NSI devices. A uniform sunset date would provide the greatest certainty to the public, as well as to PSAPs and CMRS providers, and would be easiest for all parties to administer. The Commission also believes that any necessary consumer education and outreach regarding a uniform deadline would be less burdensome than for an

alternative "phase-out" approach, as it would avoid public confusion with respect to timing and with regard to which NSI devices could and could not call 911; this method of eliminating the NSI requirement best balances the needs of the public, public safety, and CMRS providers.

- 29. The Commission also seeks comment on other possible transition approaches. For example, NENA has suggested that the Commission phase out the NSI rule for devices and networks that no longer support legacy circuit-switched voice calling, reasoning that this will minimize stranded investments by carriers and consumers as carriers transition to fully IP-based architectures such as LTE and as consumers transition to IP-only devices that no longer support circuit-switched voice services. Alternatively, the Commission seeks comment on whether to eliminate the NSI requirement for new wireless devices sold after a particular date, thus grandfathering the 911 call-forwarding capability for existing NSI devices.
- 30. In the event the Commission sunsets the NSI rule, it would seek to educate consumers during the transition on whether their particular NSI device will allow them to reach 911, and on how to ensure continued, uninterrupted access to 911. The Commission recognizes that the public is increasingly reliant on wireless technology for their basic communications needs and that many persons have elected to do without landline telephone service. With this in mind, the Commission believes that elimination of the NSI rule must be accompanied by sufficient public education and outreach to ensure that the public is aware that they can no longer call 911 from NSI devices prior to loss of that capability, but that there are low-cost options for replacing such devices. Accordingly, the Commission proposes to allow a six-month transition period for service providers, public interest organizations, and other interested parties to engage in this educational outreach process, and seek comment on this proposal. We also seek comment on the necessary components of such an education and outreach effort, and on implementation of these components.
- 31. Finally, assuming that the NSI call-forwarding rule is eliminated after a transition period, should CMRS providers be allowed to forward 911 calls from NSI devices at their discretion on a voluntary basis, or should we prohibit NSI call forwarding? What is the likelihood that CMRS providers

would voluntarily continue to forward 911 calls from NSI devices? Would allowing them to do so reduce the benefits of eliminating the NSI requirement?

- C. Protecting Calls to 911 from Service-Initialized Devices that May Appear to be NSI
 Devices
- 32. <u>Background</u>. The obligation of CMRS providers to transmit 911 calls without regard to their call validation process ensures that wireless customers are able to access life-saving emergency services without delay. This obligation to connect 911 calls from service-initialized devices ensures, for example, that customers have access to 911 when traveling in areas where service may be provided by another provider which does not have a roaming agreement with the customer's provider or when a wireless customer's provider is experiencing a network outage. The Commission does not propose to alter the obligation of CMRS providers to connect calls from devices that have a valid agreement with any CMRS provider at the time of the 911 call.
- 33. The record indicates, however, that in certain circumstances a service-initialized device may appear to be an NSI device to a CMRS provider's network. For example, according to the Petitioners, devices can also become NSI in the following situations: (1) when a phone has not completed registration at the time a 9-1-1 call is placed; (2) when calls are placed from areas of weak or no signal for one carrier that receive a signal from another carrier; (3) when calls are made from a handset that selects the strongest signal, which may not be the subscriber's carrier; (4) for calls placed by consumers roaming in areas with or without automatic roaming agreements; (5) for calls placed on foreign phones; or (6) because of normal network events, system reboots, and other circumstances that can occur during mobile switching center ('MSC') to MSC handoffs, for several seconds after the phone is powered on, and as the phone recovers from loss of service in a tunnel. The Commission also observes that, when pre-paid phones have run out of minutes, they become *de facto* NSI devices until the user pays for more pre-paid minutes.
- 34. <u>Discussion</u>. The Commission seeks comment on how calls to 911 from service-initialized devices that may appear to be NSI might be affected, in the event it sunsets the requirement to

transmit calls from NSI devices. Is this an extensive issue of concern? For example, in what specific circumstances would a service-initialized device nevertheless appear to a CMRS network as an NSI device? If the Commission were to sunset the NSI requirement, is there a way to ensure that such service-initialized devices could still call 911? What would be the cost of implementing such a solution? The Commission is also concerned that consumers with service-initialized phones could be at risk if they were to lose 911-capability immediately following a CMRS provider's stoppage of service for non-payment. Would it be in the public interest to require all CMRS providers to continue to forward calls to 911 from such devices for a certain "grace period" following stoppage of service? If so, what would be the proper length of such a grace period? Should it differ based on whether the device is pre-paid or post-paid? Alternatively, rather than establishing a grace period, would it be sufficient for CMRS providers to send automated messages to pre-paid customers when their minutes are about to expire, warning them that if they do not extend their pre-paid service their devices will not support 911 calling?

D. Technical and Operational Considerations Relating to Sunset of the NSI Rule

- 35. The Commission seeks to determine what technical and operational changes, if any, CMRS providers and/or PSAPs would need to implement in conjunction with the sunset of the NSI rule, including the timeframe needed to implement any such changes, as well as the costs involved, as well as determining how these answers might vary depending on whether the Commission sunsets the rule on a date certain or whether it phases out the rule.
- 36. What network modifications or other technical and operational changes would CMRS providers need to undertake, if any, if we were to sunset the NSI requirement as of a date certain? How long would it take to implement these changes? At what cost? Is the Commission's assumption that any costs associated with discontinuing call-forwarding of 911 calls from NSI devices as of the six-month sunset date proposed above would be relatively minor correct? The Commission also seeks comment on what, if anything, PSAPs would need to do to accommodate the sunset of the NSI requirement after six months. Would PSAPs incur any costs or are there timing considerations that the Commission should take into account? Alternatively, what technical and operational changes would CMRS providers and

PSAPs need to implement if the Commission were to phase out the NSI requirement rather than sunset the rule on a uniform date?

E. Alternative Approaches to the Problem of Fraudulent NSI 911 Calls

- 37. The Commission recognizes that sunsetting the NSI rule is not the only means of reducing the incidence of fraudulent calls to 911 from such devices. In the *Notice of Inquiry*, the Commission examined the possibility of blocking NSI devices used to make fraudulent 911 calls while retaining the NSI rule itself, and sought comment on suggestions for making blocking a more viable option for CMRS providers, as well as on other possible solutions. The Commission seeks comment on whether call-blocking is a viable alternative to sunsetting the NSI rule. While Commission rules generally require CMRS providers to forward all 911 calls to PSAPs, including calls from NSI devices, they do not prohibit CMRS providers from blocking fraudulent 911 calls pursuant to applicable state and local law enforcement procedures. Nevertheless, the Petition asserted that CMRS providers refuse to honor PSAP blocking requests due to technical and legal concerns. In response to the *Notice of Inquiry*, many commenters both CMRS provider and public safety cited technical and legal problems that continue to make blocking calls difficult.
- 38. In the <u>Notice of Inquiry</u>, the Commission requested comment on two other alternative approaches to address the problem of fraudulent 911 calls from NSI devices: (1) implementing call-back capabilities for NSI devices, and (2) requiring CMRS provider-sponsored device donation programs to provide service-initialized devices. The Commission seeks further comment on the relative costs and benefits of these proposals as alternatives to sunsetting the NSI rule.

IV. Procedural Matter

F. Ex Parte Presentations

39. The proceedings initiated by this NPRM shall be treated as "permit-but-disclose" proceedings in accordance with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any

oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must: (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made; and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

G. Comment Filing Procedures

40. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments in response to this NPRM on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
- Paper Filers: Parties that choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
 U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street,
 SW, Washington DC 20554.

H. Accessible Formats

41. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

I. Regulatory Flexibility Analysis

42. An Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document is located under section titled *Initial Regulatory Flexibility Analysis*. Written public comments are requested in the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this NPRM as set forth on the first page of this document, and have a separate and distinct heading designating them as responses to the IRFA.

J. Paperwork Reduction Act Analysis

43. This document contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by Paperwork Reduction Act of 1995 (PRA), Public Law No. 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, the Commission seeks specific comment on how it might further reduce the information collection burden for small business concerns with fewer than 25 employees.

V. Initial Regulatory Flexibility Analysis

44. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact of the proposal described in the attached Notice of Proposed Rulemaking on small entities. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments in the Notice of Proposed Rulemaking. The Commission will send a copy of the Notice of Proposed Rulemaking, including this IRFA, to the Chief Counsel for Advocacy of the

Small Business Administration (SBA). In addition, the Notice of Proposed Rulemaking and IRFA (or summaries thereof) will be published in the Federal Register.

A. Need for, and Objectives of, the Proposed Rules

- 45. In this NPRM, we address regulatory concerns raised by non-service initialized (NSI) devices. The Commission's rules require commercial mobile radio service (CMRS) providers subject to the 911 rules to transmit all wireless 911 calls, including those originated from "non-service-initialized" (NSI) devices, to Public Safety Answering Points (PSAPs). A NSI device is a mobile device for which there is no valid service contract with a CMRS provider. Examples of NSI devices include prepaid cell phones with expired minutes, devices under an expired contract, donated cell phones, and "911-only" devices that are configured solely to make emergency calls. NSI devices by their nature have no associated subscriber name and address, and do not provide Automatic Number Identification (ANI) or call-back features. As a result, when a caller uses a NSI device to call 911, the PSAP typically cannot identify the caller.
- 46. While the 911 calling capability of NSI devices initially provided significant public safety benefits by increasing the public's access to 911, those benefits have greatly decreased due to changed call validation methods and the increase in low-cost options for wireless services. Moreover, the inability of PSAPs to identify the caller on an NSI device creates significant difficulty for them when a caller uses a NSI device to place fraudulent non-emergency calls to the PSAP. Numerous PSAPs around the nation have reported that fraudulent and harassing calls from NSI devices are a persistent and significant problem that requires action. In February 2008, a group of public safety entities filed a petition requesting that the Commission examine the issue. In response to the petition, the Commission adopted a Notice of Inquiry in April 2008 to enhance our understanding of fraudulent and harassing 911 calls made from NSI devices and to explore potential solutions.

47. In this NPRM, the Commission proposes to sunset the NSI rule after a six month transition period that will allow for public outreach and education. It also seeks comment on alternative approaches to addressing the issue of fraudulent calls from NSI devices.

B. Legal Basis

- 48. The legal basis for any action that may be taken pursuant to this Notice of Proposed Rulemaking is contained in Sections 1, 4(i), 4(j), 303(r) and 332 of the Communications Act of 1934, 47 U.S.C. §§ 151, 154(i), 154(j), 303(r), 332.
 - C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Would Apply
- 49. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).
- 50. <u>Small Businesses, Small Organizations, and Small Governmental Jurisdictions.</u>
 Our action may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive, statutory small entity size standards. First, nationwide, there are a total of approximately 27.5 million small businesses, according to the SBA. In addition, a "small organization" is generally any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term "small governmental

jurisdiction" is defined generally as governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand. Census Bureau data for 2011 indicate that there were 89,476 local governmental jurisdictions in the United States. We estimate that, of this total, as many as 88, 506 entities may qualify as "small governmental jurisdictions." Thus, we estimate that most governmental jurisdictions are small.

1. Telecommunications Service Entities

a. Wireless Telecommunications Service Providers

- 51. Pursuant to 47 CFR § 20.18(a), the Commission's 911 service requirements are only applicable to Commercial Mobile Radio Service (CMRS) providers, excluding mobile satellite service operators, to the extent that they: (1) Offer real-time, two way switched voice service that is interconnected with the public switched network; and (2) Utilize an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. These requirements are applicable to entities that offer voice service to consumers by purchasing airtime or capacity at wholesale rates from CMRS licensees.
- 52. Below, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.
- 53. <u>Wireless Telecommunications Carriers (except Satellite)</u>. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category. Prior to that time, such firms were within the now-superseded categories of "Paging" and "Cellular and Other Wireless Telecommunications." Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. For the category of Wireless

Telecommunications Carriers (except Satellite), Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year. Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small.

- standard for wireless firms within the two broad economic census categories of "Paging" and "Cellular and Other Wireless Telecommunications." Under both categories, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year. Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more. Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year. Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more. Thus, under this second category and size standard, the majority of firms can, again, be considered small.
- 55. <u>Incumbent Local Exchange Carriers (Incumbent LECs).</u> Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2007, which now supersede data from the 2002

Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1000 or more. According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers. Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees. Consequently, the Commission estimates that most providers of local exchange service are small entities that may be affected by the rules and policies proposed in the Notice. Thus under this category and the associated small business size standard, the majority of these incumbent local exchange service providers can be considered small.

Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers. Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Competitive LECs, CAPs, Shared-Tenant Service Providers, and Other Local Service Providers can be considered small entities. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services. Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees. In addition, 17

carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees. In addition, 72 carriers have reported that they are Other Local Service Providers. Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities that may be affected by rules adopted pursuant to the Notice.

57. Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission initially defined a "small business" for C- and F-Block licenses as an entity that has average gross revenues of \$40 million or less in the three previous calendar years. For F-Block licenses, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years. These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA. No small businesses within the SBAapproved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that claimed small business status in the first two C-Block auctions. A total of 93 bidders that claimed small business status won approximately 40 percent of the 1,479 licenses in the first auction for the D, E, and F Blocks. On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22. Of the 57 winning bidders in that auction, 48 claimed small business status and won 277 licenses.

- 58. On January 26, 2001, the Commission completed the auction of 422 C and F Block Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in that auction, 29 claimed small business status. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. On February 15, 2005, the Commission completed an auction of 242 C-, D-, E-, and F-Block licenses in Auction No. 58. Of the 24 winning bidders in that auction, 16 claimed small business status and won 156 licenses. On May 21, 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction No. 71. Of the 12 winning bidders in that auction, five claimed small business status and won 18 licenses. On August 20, 2008, the Commission completed the auction of 20 C-, D-, E-, and F-Block Broadband PCS licenses in Auction No. 78. Of the eight winning bidders for Broadband PCS licenses in that auction, six claimed small business status and won 14 licenses.
- 59. Narrowband Personal Communications Services. To date, two auctions of narrowband personal communications services (PCS) licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order. A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A "very small business" is an entity that, together with affiliates and

controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these small business size standards.

- 60. Specialized Mobile Radio. The Commission awards "small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years. The Commission awards "very small entity" bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years. The SBA has approved these small business size standards for the 900 MHz Service. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR was completed in 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels was conducted in 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band. A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.
- 61. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels was conducted in 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded. Of the 22 winning bidders, 19 claimed "small business" status and won 129 licenses. Thus, combining all

three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

- 62. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. In addition, we do not know how many of these firms have 1500 or fewer employees. We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is approved by the SBA.
- 63. AWS Services (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and 2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3)). For the AWS-1 bands, the Commission has defined a "small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a "very small business" as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. In 2006, the Commission conducted its first auction of AWS-1 licenses. In that initial AWS-1 auction, 31 winning bidders identified themselves as small businesses. Twenty-six of the winning bidders identified themselves as small businesses. In a subsequent 2008 auction, the Commission offered 35 AWS-1 licenses. Four winning bidders identified themselves as very small businesses, and three of the winning bidders identified themselves as a small business. For AWS-2 and AWS-3, although we do not know for certain which entities are likely to apply for these frequencies, we note that the AWS-1 bands are comparable to those used for cellular service and personal communications service.

The Commission has not yet adopted size standards for the AWS-2 or AWS-3 bands but has proposed to treat both AWS-2 and AWS-3 similarly to broadband PCS service and AWS-1 service due to the comparable capital requirements and other factors, such as issues involved in relocating incumbents and developing markets, technologies, and services.

- 64. <u>Rural Radiotelephone Service</u>. The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service. A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System ("BETRS"). In the present context, we will use the SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), *i.e.*, an entity employing no more than 1,500 persons. There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.
- 65. Wireless Communications Services. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses in the 2305-2320 MHz and 2345-2360 MHz bands. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these definitions. The Commission auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity.

- Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, the Commission applies the small business size standard under the SBA rules applicable. The SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. For this service, the SBA uses the category of Wireless Telecommunications Carriers (except Satellite). Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year. Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small.
- Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the 220 MHz Third Report and Order, the Commission adopted a small business size standard for defining "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. This small business standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. A "very small business" is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years. The SBA has approved these small size

standards. Auctions of Phase II licenses commenced on and closed in 1998. In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold. Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses. A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses. In 2007, the Commission conducted a fourth auction of the 220 MHz licenses. Bidding credits were offered to small businesses. A bidder with attributed average annual gross revenues that exceeded \$3 million and did not exceed \$15 million for the preceding three years ("small business") received a 25 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed \$3 million for the preceding three years received a 35 percent discount on its winning bid ("very small business"). Auction 72, which offered 94 Phase II 220 MHz Service licenses, concluded in 2007. In this auction, five winning bidders won a total of 76 licenses. Two winning bidders identified themselves as very small businesses won 56 of the 76 licenses. One of the winning bidders that identified themselves as a small business won 5 of the 76 licenses won.

68. <u>700 MHz Guard Band Licenses</u>. In the 700 MHz Guard Band Order, the Commission adopted size standards for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its

affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. SBA approval of these definitions is not required. In 2000, the Commission conducted an auction of 52 Major Economic Area ("MEA") licenses. Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced and closed in 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.

- 69. <u>Upper 700 MHz Band Licenses</u>. In the 700 MHz Second Report and Order, the Commission revised its rules regarding Upper 700 MHz licenses. On January 24, 2008, the Commission commenced Auction 73 in which several licenses in the Upper 700 MHz band were available for licensing: 12 Regional Economic Area Grouping licenses in the C Block, and one nationwide license in the D Block. The auction concluded on March 18, 2008, with 3 winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) and winning five licenses.
- The Commission previously adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits. The Commission defined a "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. A "very small business" is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. Additionally, the lower 700 MHz Service had a third category of small business status for Metropolitan/Rural Service Area (MSA/RSA) licenses—"entrepreneur"—which is defined as an entity that, together with its affiliates and

controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. The SBA approved these small size standards. An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) was conducted in 2002. Of the 740 licenses available for auction, 484 licenses were won by 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won licenses. A second auction commenced on May 28, 2003, closed on June 13, 2003, and included 256 licenses. Seventeen winning bidders claimed small or very small business status, and nine winning bidders claimed entrepreneur status. In 2005, the Commission completed an auction of 5 licenses in the Lower 700 MHz band. All three winning bidders claimed small business status.

- 71. In 2007, the Commission reexamined its rules governing the 700 MHz band in the 700 MHz Second Report and Order. An auction of A, B and E block 700 MHz licenses was held in 2008. Twenty winning bidders claimed small business status (those with attributable average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years). Thirty three winning bidders claimed very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years).
- 72. Offshore Radiotelephone Service. This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico. There are presently approximately 55 licensees in this service. The Commission is unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for the category of Wireless Telecommunications Carriers (except Satellite). Under that standard. Under that SBA small

business size standard, a business is small if it has 1,500 or fewer employees. Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year. Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small.

- 73. Wireless Telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite). Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees. According to Trends in Telephone Service data, 413 carriers reported that they were engaged in wireless telephony. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Therefore, more than half of these entities can be considered small.
- 74. <u>Satellite Telecommunications Providers.</u> Two economic census categories address the satellite industry. The first category has a small business size standard of \$15 million or less in average annual receipts, under SBA rules. The second has a size standard of \$25 million or less in annual receipts.
- 75. The category of Satellite Telecommunications "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications." Census Bureau data for 2007 show that 512 Satellite Telecommunications firms that operated for that entire year. Of this total, 464 firms had annual receipts of under \$10 million, and 18 firms had receipts of \$10

million to \$24,999,999. Consequently, the Commission estimates that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

"establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.

Establishments providing Internet services or Voice over Internet Protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry." For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year. Of this total, 2,346 firms had annual receipts of under \$25 million and 37 firms had annual receipts of \$25 million to \$49, 999,999. Consequently, the Commission estimates that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

b. Equipment Manufacturers

Manufacturing. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment." The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing which is: all such firms

having 750 or fewer employees. According to Census Bureau data for 2007, there were a total of 939 establishments in this category that operated for part or all of the entire year. Of this total, 784 had less than 500 employees and 155 had more than 100 employees. Thus, under this size standard, the majority of firms can be considered small.

- 78. <u>Semiconductor and Related Device Manufacturing</u>. These establishments manufacture computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. According to data from the 2007 U.S. Census, in 2007, there were 954 establishments engaged in this business. Of these, 545 had from 1 to 19 employees; 219 had from 20 to 99 employees; and 190 had 100 or more employees. Based on this data, the Commission concludes that the majority of the businesses engaged in this industry are small.
 - D. Description of Projected Reporting, Recordkeeping, and Other Compliance
 Requirements for Small Entities
- 79. The *Notice of Proposed Rulemaking* does not propose any recordkeeping or reporting requirements.
 - E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered
- 80. The RFA requires an agency to describe any significant, specifically small business alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting

requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for small entities.

- 81. The <u>Notice of Proposed Rulemaking</u> proposes sunsetting the NSI rule after a sixmonth transition period, as well as seeking comment on a variety of possible alternatives to addressing the issue of fraudulent calls from NSI handsets. Because sunsetting the NSI rule will remove certain call-forwarding obligations on small entities, it is likely the method that would impose the least costs on these small entities.
 - F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules
 - 82. None.

VI. Ordering Clause

- 83. The Federal Communications Commission ADOPTS, pursuant to Sections 1, 4(i), 4(j), 303(r) and 332 of the Communications Act of 1934, 47 U.S.C. §§ 151, 154(i), 154(j), 303(r), 332, this Notice of Proposed Rulemaking.
- 84. It is further ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects

47 CFR Part 20

Communications common carriers

Communications equipment

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch, Secretary.

Proposed Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 part 20 as follows:

PART 20 – COMMERCIAL MOBILE RADIO SERVICES

1. The authority citation for part 20 continues to read:

AUTHORITY: 47 U.S.C. 151, 152(a), 154(i), 157, 160, 201, 214, 222, 251(e), 301, 302, 303, 303(b), 303(r), 307(a), 309, 309(j)(3), 316, 316(a), 332, 615, 615a, 615b, 615c.

2. Section 20.18 is amended by revising paragraph (b) and adding paragraph (o)(4), to read as follows:

§ 20.18 911 Service

(b) <u>Basic 911 Service</u>. CMRS providers subject to this section must transmit all wireless 911 calls without respect to their call validation process to a Public Safety Answering Point, or, where no Public Safety Answering Point has been designated, to a designated statewide default answering point or appropriate local emergency authority pursuant to § 64.3001 of this chapter, provided that "all wireless 911 calls" is defined as "any call initiated by a wireless user dialing 911 on a phone using a compliant radio frequency protocol of the serving carrier." After [insert date six months from the effective date of the Order], the requirements of this section will no longer apply to calls from non-service-initialized handsets as defined in paragraph (o)(3)(i) of this section.

(o) ***

(4) <u>Sunset</u>. The requirements of this paragraph shall cease to be effective [insert date six months from the effective date of the Order].

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